

Activity # 13

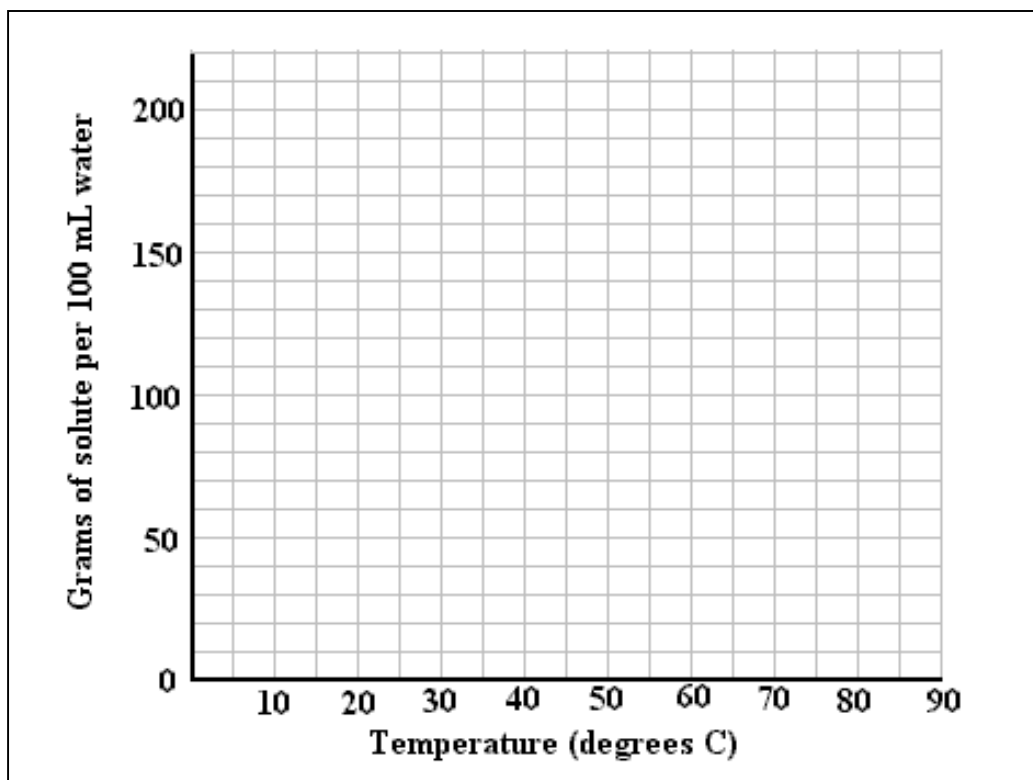


Title: Solubility Curves-Student's Response Sheet

- Assigned temperature = _____ °C
Solute (sugar or salt) = _____
Total grams of solute required for saturation = _____ g
- Complete the following data table as lab teams report their findings: (Procedure Step #5)

Assigned temperature (degrees C)	Grams of salt required for saturation of 50 mL of water	Grams of salt required for saturation of 100 mL of water	Grams of sugar required for saturation of 50 mL of water	Grams of sugar required for saturation of 100 mL of water
20				
30				
40				
50				
60				
70				
80				
90				

- Plot the grams of solute dissolved on 100 mL of water on the Y-axis and the temperature in °C on the X-axis for **each** solute tested in class as each individual lab team discloses its results. (Procedure Step #5)



Follow-up/Conclusions:

1. _____

2. _____

3. _____

4. As the temperature of the solvent (water) increases, the number of grams of solute required to saturate a solution _____ (increases, decreases, remains the same).
5. _____

6. _____ is the independent variable in this activity because we had control over its values throughout the lab.
7. _____ is the dependent variable in this activity because _____.
8. _____

9. _____

10. _____ and _____ have nearly the same solubility in water at room temperature (approx. 20°C).
11. About _____ grams of potassium nitrate (KNO_3) would precipitate out of solution if cooled from 100°C to 60°C.
12. _____

13. _____

14. _____
